AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently Amended) A method of treating a patient in need of increased vagal tone, comprising the step of delivering to said patient's cardiac autonomic structures a nucleic acid molecule encoding nitric oxide synthase which, when expressed, increases nitric oxide synthase levels.

2. (Currently Amended) A pharmaceutical composition comprising a nucleic acid molecule encoding nitric oxide synthase which, when expressed in cardiac autonomic structures, increases nitric oxide synthase levels.

3. (Previously Presented) The method of claim 1, wherein treatment is for increasing cardiac vagal tone, increasing cardiac vagal responsiveness, increasing bradycardia, reducing cardiac autonomic impairment, reducing the risk of sudden cardiac death, reducing arrhythmia, reducing the risk of myocardial infarction or reducing hypertension.

4. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is delivered to the vagus nerve.

5. (Previously Presented) The method of claim 1, wherein said nitric oxide synthase is NOS-1 or NOS-3.

6. (Previously Presented) The method of claim 5, wherein the NOS-1 is human NOS-1.

7. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is targeted to cardiac tissue.

8. (Previously Presented) The method of claim 1, wherein expression of the nitric oxide synthase from said nucleic acid molecule is regulated by a non-constitutive promoter.

9. (Previously Presented) The method of claim 1, wherein expression of said nitric oxide synthase is regulated by a promoter which is specifically active in cholinergic ganglia tissue.

10. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is packaged within a non-viral gene therapy vector.

11. (Previously Presented) The method of claim 10, wherein said nucleic acid molecule is delivered as naked DNA.

12. (Previously Presented) The method of claim 3, wherein cardiac vagal tone in the patient is increased by at least 10%.

13. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule comprises DNA.

14. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is non-replicating.

15. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is non-integrating.

16. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is an autonomously replicating episomal or extrachromosomal vector, such as a plasmid.

17. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is delivered to the heart within microbubbles which can be disrupted by ultrasound.

18. (Currently Amended) [[A]] The method of claim 1, wherein said nucleic acid molecule encoding nitric oxide synthase comprises ~~comprising~~ a non-constitutive promoter and a coding sequence, wherein: (a) said promoter is operably linked to the coding sequence to control transcription of the coding sequence; and (b) said promoter is specifically active in cholinergic ganglia tissue~~; and (c) said coding sequence encodes a nitric oxide synthase~~.

19. (Cancelled) A pharmaceutical composition comprising the nucleic acid molecule of claim 18.